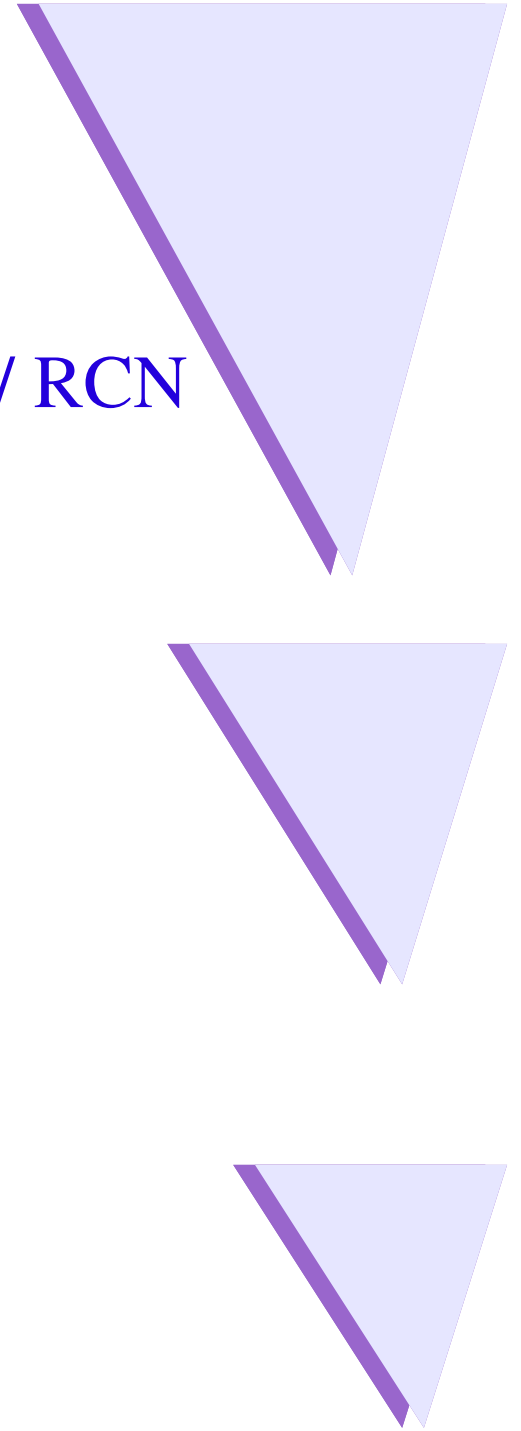# *Status and Plan of the EVM development*

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Current Activities

- Software development for the XDAQ w/ RCN
  - Reliable broadcast library (libFRB)
  - Peer-transport for the libFRB (ptFRB)
  - XDAQ w/ RCN on Ethernet
- GTP-EVM connection study
- Trial integration at CERN demonstrator
- FNAL test bench upgrade
- Simulation (not covered)

Software Development

- **libFRB**
  - A reliable broad cast library was implemented on Ethernet/UDP
  - The development utilized a part of MIL-STD-498
    - Software test plan + Software test report
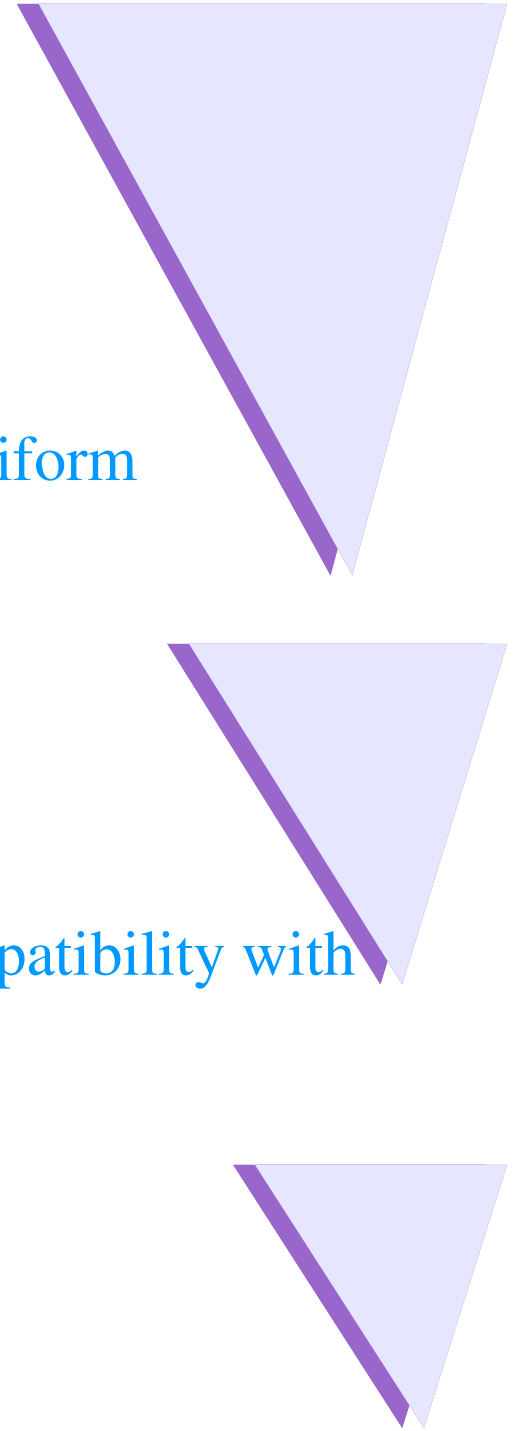 - The reliability was confirmed via several tests for limited set of configurations
- **ptFRB**
  - Working on software and test document in parallel (not in MIL-STD-498 format)
  - Functionality test will be done in a week

GTP-EVM

- Dummy GTP software on Linux was developed and tested (L. Churchill)

- Modification of the XDAQ-RM (M. Litmaath)
  - New trigger generator thread reading from Myrinet.

- VxWorks version of the dummy GTP is currently under development

Hardware Upgrade

- Upgrade in Aug.02
  - 8+1 P4DL6 based machines: faster, more uniform environment
  - A console server PC: easier maintenance
  - FermiLinux 7.3

- Upgrade in fiscal year 2003
  - LANai10 based Myrinet NICs: keeping compatibility with the CERN demonstrator
  - Myrinet 2000 fiber switch

Integration at CERN

- libFRB: done

- ptFRB: next week

- XDAQ-RCN: 1st week of Sep.

- GTP-RM connection: end of Aug.

- Full integration at FNAL: 2nd and 3rd weeks in Sep.

- System preparation at CERN: in the CMS week

- Software integration and tests: 1st week of Oct.

Summary

- Status
  - Software components interacting with the EVM are being developed
  - FNAL test bench hardware catches up with technology changes and keeps compatibility with the CERN demonstrator
- Plan
  - Trial integration at the CERN demonstrator in Sep.02
  - Full integration (XDAQ w/ BS+RCN+GTP) in Dec.02
  - Further EVM study and software development in 2003